

### **REMARKS**

Claims 1-10 and 12-35 are amended in response to the Office Communication of May 17, 2007. Claim 11 is canceled. Claim 36 is new. Thus, claims 1-10 and 12-36 are pending in this application.

Independent claims 1, 12, 22, and 32 are amended to disclose methods for organizing and storing peer identities, group identities, group membership identities, and group identity stores, respectively, for use in a peer-to-peer network. Their respective dependent claims are also amended to coordinate with the changes to the independent claims.

Claim 10 is amended to include the matter of canceled claim 11. New claim 36 discloses an identity certificate store, which is illustrated by Figure 5 and discussed in paragraph [0037] of the pending application.

Additionally, claims 10, 11, 20, 21, and 30 are amended to correct typographical errors.

#### **General Remarks:**

The claims 1-10, 12-35 and new claim 36 are amended/added to clearly specify the new and useful methods for organizing and storing peer identities, group identities, group membership identities, peer identity stores and group identity stores for use in a peer-to-peer network. The disclosed methods have utility in addressing the problem of how a peer-to-peer user “can manage a host of identities and their certificates in order to, for example, effectively resolve the communications issues of addressing, identity verification, and trust extension” [0007]. While one embodiment of a method may utilize an X.509 certificate as a part of its implementation, the novelty of the independent claims resides in the processes of organizing and storing peer identity, group identity and group membership

identity information in a peer-to-peer network. Additionally, methods for organizing group membership stores (as disclosed by claim 32 and its dependent claims) and peer identity stores (as disclosed by claim 36) help mitigate the problem of managing multiple peer-to-peer identities.

The support for the amended claims can be found in Figures 3, 6, and 8 and their respective sections in the Detailed Description of the Invention.

#### Claim Rejections Under 35 USC §101

Claims 1-35 were rejected under 35 U.S.C. 101 because the claimed invention was directed to non-statutory subject matter.

The amended claims 1-10, 12-35 and new claim 36 are directed to methods of organizing and storing identities in a peer-to-peer network. As the amended claims disclose new and useful processes and not new composition of matter, the Applicants believe that claims 1-10 and 12-36 are allowable under 35 USC §101.

#### Claim Rejections Under 35 USC §102

Claims 1-35 were rejected under 35 U.S.C. 102(b) as being anticipated by Internet X.509 Public Key Infrastructure Certificate and CRL Profile, hereinafter “FRC2459.”

The amended claims 1-10, 12-35 and new claim 36 are directed to methods for organizing and storing peer identities, group identities, group membership identities, peer identity stores and group identity stores for use in a peer-to-peer network. FRC2459 does not disclose a method for organizing peer-to-peer network data. It discusses different fields and

the uses of these fields as defined by the X.509 certificate standard. Peer-to-peer networks, their required data and properties are not mentioned by FRC2459, nor is there any mention of methods to organize and store peer-to-peer information in FRC2459.

Although some embodiments of the claimed methods may partly utilize the X.509 standard to perform organization and storage processes, the dependently claimed methods use X.509 merely as one possible (but not necessary) mechanism of implementation. The pending claims do not claim the structures as defined by FRC249. They are an advancement over the X.509 standard because they address solutions to the peer-to-peer identity management problem. The X.509 standard does not mention solutions for managing multiple peer-to-peer identities. It merely outlines the infrastructure and data structures by which entities may perform functions such as authentication and authorization over the Internet. It does not disclose providing methods for organizing and storing a host of peer-to-peer identities and group identities for use in a peer-to-peer network.

The novelty of the pending claims lies in the disclosure of methods for organizing and storing peer-to-peer identities so that peer-to-peer users can list and manipulate identities in an efficient manner. A user may have multiple peer identities, with each identity serving in a different role. The identities of a user may belong to multiple groups whose membership may overlap. A user may also originate and serve in an administration role for multiple groups. Thus, the number of possible identities, group identities and group memberships associated with a user can quickly multiply. By using the organization and storage methods of the pending application, e.g., using peer and peer group names as keys for storage and providing identity and group identity stores, the management of a user's potential plethora of identity information is made tractable.

As FRC2459 does not claim methods for organizing and storing peer identities, group identities, group membership identities, peer identity stores and group identity stores for use in a peer-to-peer network, FRC2459 does not anticipate claims 1-10 and 12-36. Accordingly, the Applicants believe that claims 1-10 and 12-36 are in a condition for allowance.

### **CONCLUSION**

In view of the above amendment and arguments, the Applicants submit the pending application is in condition for allowance and an early action so indicating is respectfully requested.

The Commissioner is authorized to charge any fee deficiency required by this paper, or credit any overpayment, to Deposit Account No. 13-2855, under Order No. 30835/303181, from which the undersigned is authorized to draw.

Dated: August 17, 2007

Respectfully submitted,

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